

REMARKS

I. Status Of The Claims And The Rejections

First of all, applicant acknowledges the indication in the Office Action that the drawings filed on June 18, 2008 are accepted. Applicant also notes the indication in the Office Action that a claim for foreign priority has been made under Section 119, and that the certified copies of the priority documents have been received from the International Bureau.

Claims 2-5 and 7-21 are pending in this application. The Office Action included a rejection of all of these pending claims. The Office Action also identified a number of claim objections.

More particularly, claim 11 was objected to due to lack of sufficient antecedent basis for the phrase "the cabin." Applicant has amended claim 11 to overcome this objection. Claim 18, a method claim, was objected to because it depends on claim 10, a device claim. The Office Action notes that claim 18 has been treated so as to depend on claim 11, rather than claim 10. With this amendment applicant has amended claim 18 to confirm this manner of treatment in the Office Action. Also, in claim 18 this amendment changes the word "comprises" to the word "comprising," as suggested in the Office Action.

Each of dependent claims 19-21 was rejected for alleged indefiniteness under Section 112. Primarily, each of these claims recites "the angle." However, base claim 5 from which each of these claims previously depended does not refer to "the angle." The Office Action indicates that the examiner has considered each of these three claims to be dependent on claim 18, rather than claim 5. Nonetheless, this amendment changes the dependencies of each of these claims to dependent claim 4. Claim 4 does supply antecedent basis for "the angle."

Substantively, claims 2-4 and 7-21 were rejected for alleged obviousness under Section 103, based on a combination of Rother U.S. Patent No. 2,516,805 ("Rother '805") and Japan

Patent No. JP 59093141 ("Japan '141"). Claim 5 was rejected for alleged obviousness based on the same combination of Rother '805 and Japan '141, but further in view of de Villiers '432, a reference cited in an earlier Office Action.

First of all, applicant respectfully acknowledges the implicit indication in the final Office Action that the prior Section 102(b) rejections, based on Japan '947 and Holyoake '335, have now been overcome. Moreover, the previously cited Daniels '696, Smith '777, and Meurer '419 references are no longer cited against any of the pending claims. Only de Villiers '352 remains cited, against dependent claim 5.

Nonetheless, applicant respectfully traverses the rejections. More particularly, the Office Action fails to make a proper *prima facie* case for combining these two cited references. More specifically, the Office Action states as follows:

These two references, when considered together, teach all of the elements recited in claims 2-4 and 7-21 of this application, except for obvious matters of design choice and certain optimized claimed ranges (claims 9 and 15-21).

In substance, the rejections depend upon a mere aggregation of structural components from completely unrelated prior art references. The Office Action fails to supply any objective reasons for combining the relied-upon references in the manner suggested. For these reasons, applicant respectfully requests reconsideration.

Moreover, applicant submits herewith a Second Supplemental Information Disclosure Statement.

II. The Claimed Subject Matter

Independent claim 11 is directed to a method for air conditioning an aircraft cabin. This method comprises generating and directing at least one air jet into the aircraft cabin via at least one blower, measuring the temperature of the air jet, and altering the direction and/or the impulse of the air jet depending upon the measured temperature, wherein the altering occurs via alteration

of the blower. Dependent claims 2, 4, 5, 18, 19, 20, and 21 depend upon claim 11, either directly or indirectly. And each recites one or more additional features in combination with the features of independent claim 11.

Independent claim 12 is directed to a device for air conditioning an aircraft cabin. The device includes means for generating and directing at least one air jet into the aircraft cabin, means for measuring the temperature of the at least one air jet, and means for altering the direction and/or the impulse of the air dependent upon the measured air jet temperature. The means for altering is adapted to rotate the means for altering and generating, so as to rotatably change the rotation of the air jet. Dependent claims 7, 8, 9, 10, 14, 15, 16, and 17 depend upon claim 12, either directly or indirectly. Each further recites one or more additional features in combination with the features of independent claim 12.

III. The Cited Prior Art

A. Rother '805

Rother '805 issued in 1950, more than 50 years before the priority date of the present application. Rother '805 is directed to a manually operated ventilating apparatus for an aircraft. Rother '805 relates "particularly to controllable ventilator outlets." One object of Rother '805 is to improve upon the "means for controlling the volume of air flowing therethrough." Another object of Rother '805 is to reduce noise. Another object of Rother '805 is to provide an improved ventilator outlet that is "readily operable by the individual passenger to control the volume of ventilating air flowing through the outlet and the direction of air flow." (emphasis added) In other words, independent and manual operation by the passenger is a primary objective of Rother '805.

As shown particularly in Figs 3 and 4 of Rother '805, the passenger in the aircraft manipulates plunger 35 to orient ball portion 27 of housing 26 to a desired direction. Moreover,

plunger 35 can be moved axially with respect to bore 31 to open and to thereby increase the space between the back side of plunger 35 and a conically-shaped member 54, thereby to enable pressurized air to flow through passage 51.

Between the plunger 35 and the ball portion 27, Rother '805 discloses specific structure for adjusting and positively locating the tubular member 35 within ball portion 27 in a variety of set positions. More specifically, as noted in column 3, lines 1-50, the outer wall surface 37 of plunger 35 includes a vertically spaced series of depressions 48 into which a spring pressed ball 48 is adapted to extend, while notch 48 is aligned with an inner opening of bore 45 to enable indexing, or set detented positions for the plunger 35. This structure enables the passenger to manually control the plunger 35 to achieve the desired volume of air flow at the desired orientation, with the indexing structure assisting the passenger in affirmatively fixing the plunger 35 relative to the housing 26.

Relative to claim 11, the Office Action acknowledges that Rother '805 fails to disclose the step of measuring the temperature of the air jet, and also fails to disclose altering the direction and/or the impulse of the air jet depending on the measured temperature. (See page 5, first full paragraph.) Similarly, relative to independent claim 12, the Office Action acknowledges that Rother '805 fails to disclose a means for measuring the temperature of the at least one air jet, and also fails to disclose a means for altering the direction and/or the impulse of the air jet dependent on the measured temperature. (See page 8, last paragraph.)

B. Japan '141

Japan '141 discloses a fan blowing grill that is pivotable with respect to an axis defined by pivoting shaft 7, in response to movement of temperature sensitive coil 1. Japan '141 was

published in 1984, almost 20 years before the filing date of the German priority application upon which this application is based.

The structure of Japan '141 permits one degree of freedom with respect to positioning the grill 5. That degree of freedom is supplied via shaft 7, which enables grill 5 to pivot about an axis that extends into and out of the page shown in Figs 2 and 3 of Japan '141. Applicant is unaware of anything in Japan '141 that indicates applicability to an airplane.

IV. Rother '805 And Japan '414 Are Not Combinable

Rother '805 is directed to manual operation. Rother '805 is designed to enable each passenger to orient the plunger 35 so as to achieve a desired volume of air flow in a desired direction, not merely one direction relative to a fixed horizontal axis. A hypothetical person of ordinary skill in the art would have to disregard the stated objectives of Rother '805 to combine Rother '805 with Japan '141, as suggested in the final rejection.

Bluntly stated, Japan '141 is incompatible with Rother '805. If the structure of Japan '141 were used in an airplane, a passenger would not be able to independently and manually adjust the position of the grill 5 relative to pivot axis 7, because doing so would adversely affect the coil 1. This is because it does not appear that coil 1 was designed to be rotatable with respect to its own axis, to supply the degree of freedom taught by Rother '805. In other words, grill 5 is elongated and extends along an entire support structure, perhaps a hallway along a ceiling of a room

In the context of the subject matter recited in the claims, these two prior art references are simply not combinable. The Office Action fails to set forth an objective reason as to why a person of ordinary skill in the art would make this relied-upon combination. And the Office Action cannot explicitly supply a legitimate objective reason for making this combination,

because to achieve the invention as described in the claims the hypothetical person of ordinary skill in the art would have to deconstruct at least one of Rother '805 and Japan '141.

For instance, in that deconstructing, would the hypothetical person omit the indexing and detenting structure of Rother '805? Would the coil of Japan '141 be mounted for rotation? And if so, then would grill 5 have to be shortened? The answers to these questions can only be based on pure speculation. And this shows that the only roadmap for performing such a deconstructive combination, i.e. to arrive at the claims, would be the present application. This is the epitome of improper hindsight.

The Office Action sets forth in detail the various features of the rejected claims, citing analogous features of Rother '805. Then, with respect to each of the rejected claims, the Office Action simply states, in conclusory fashion, that an identical result could be obtained by looking at Japan '141. But these rejections are based on nothing more than sheer speculation.

As for the rejection of claim 5, de Villiers '532, entitled "Air Diffuser," seeks "to provide a construction which enables a sing room temperature sensing element to be able to close a diffuser when a room is too cold. (See col 1, lines 34-36.) But de Villiers is equally incompatible with Rother '805, which achieves independent manual control of a plurality of air flows in an aircraft.

For these reasons, applicant respectfully asserts that all of the final rejections set forth in the Office Action are improper, and applicant respectfully requests that they be withdrawn.

V. Conclusion

Based on this amendment and these remarks, applicant respectfully asserts that all remaining claims are in condition for allowance, and requests that they be allowed without further delay.

Applicant does not believe that any fees are due in connection with this submission. However, if any additional fees are necessary to complete this communication, the Commissioner may consider this to be a request for such and charge any necessary fees to Deposit Account No. 23-3000.

Respectfully submitted,
WOOD, HERRON & EVANS, L.L.P.

By: 
Thomas J. Burger, Reg. No. 32662

Wood, Herron & Evans, L.L.P.
2700 Carew Tower
441 Vine Street
Cincinnati, OH 45202-2917
Voice: (513) 241-2324
Facsimile: (513) 241-6234